NPP All Hands Meeting

7 December 2016

Berndt Mueller

Associate Laboratory Director for Nuclear & Particle Physics



a passion for discovery



Agenda

- Safety (Gail Mattson)
- News: RHIC, sPHENIX, EIC, ATLAS
- Strategic Planning and Growth Opportunities



Safety

- FY 2016 was a pretty good year, but we cannot let our guards down
- Winter season
 - Consider taking (or refreshing) slip simulator training
- Fire alarms
 - Be familiar with procedures, vacate building, assemble in designated spaces
 - Building 510 has 3 different fire alarm zones!
- Welcome Gail Mattson



News



RHIC Run 17

- Preparing for the 2017 RHIC Run
- 24 cryo-weeks if Presidential budget; 19 weeks if CR
- Two-week delay to re-clean 704 MHz cavity (CeC experiment)
- Cooldown planned to begin on Feb 6
- High luminosity transverse polarized 500 GeV p+p (12.5 weeks)
- Goal: Study transverse spin dynamics in QCD; sign change in the Sivers function; scale evolution of TMDs
- RHIC-f fixed target experiment (1 week)
- 62 GeV Au+Au (4 weeks), if no CR
- Goal: Study of beam energy dependence
- Proof of Principle test of coherent electron cooling (2 weeks)



sPHENIX / eRHIC

sPHENIX Project progress:

- CD-0 was granted in September 2016
- Now preparing for CD-1 review in June 2017
- Year-long CR would cause a delay in the project

eRHIC progress:

- F. Willeke appointed as Director of eRHIC R&D and Design
- NY State funding for C-Beta has started (\$25M over 4 years)
- EIC Accelerator R&D Panel met to determine funding priorities Extensive presentations from BNL and Jlab
- Search for Director of EIC Science ongoing
- NAS Study of EIC science case underway
- eRHIC planning in high gear
 eRHIC Program Steering Group (J. Yeck)
 EIC Capture Strategy Group (D. Gibbs)
 e-gun review in Jan 2017



EIC Study by NAS

- Panel:
- Ani Aprahamian, Co-Chair (U of Notre Dame)
- Gordon Baym, Co-Chair (UIUC)
- Christine Aidala (U of Michigan)
- Richard Milner (MIT)
- Ernst Sichtermann (LBNL)
- Zein-Eddine Meziani (Temple U)
- Thomas Schaefer (NC State U)
- Michael Turner (U of Chicago)
- Wick Haxton (UC Berkeley)
- Kawtar Hafidi (ANL)
- Peter Braun-Munzinger (GSI)
- Larry McLerran (U of Washington)
- Haiyan Gao (Duke U)
- John Jowett (CERN)

- Charge:
- Merit and significance of the science of a EIC
- Comparison with other US or international facilities – what is the unique role of a US based EIC?
- Benefits to US leadership in nuclear science
- Benefits to other fields of science and society of a US based EIC
- Org Meeting: Feb 1-2 (?)



HEP / Staff News

- J. Kotcher appointed as ATLAS Phase II Project Manager
- Maria Chamizo-Llatas joins NPP Project Oversight Office
- Hints of a new boson with mass ~750 GeV disappeared
- LHC Run 2 going very well
- LBNF/DUNE may slow down in case of CR
- protoDUNE work proceeding at high pace
- LSST construction going very well
- Magnet Division test of first full-length coil at 1.9K underway
- Sally Dawson co-recipient of 2017 Sakurai Prize
- Christoph Lehner wins Early Career Award
- Raju Venugopalan wins Humboldt Research Award
- Michiko Minty elected to APS-DPB chair line
- M. Minty, P. Petreczky new APS Fellows, P. Takacs OSA Fellow



Growth



Growth Retreat

- First Quarterly Growth Retreat held on Nov 28
- FY2016 was a great year for NPP: 6.8% growth in funding
 - \$279.7M (FY16) versus \$265.6M (FY15)
- Efforts to develop new growth opportunities are picking up:
 - NY State contract for C-Beta is signed, funding has started
 - NY State funding for HEX beam-line expected in Spring 2017
 - NY State funding for computing
 - Success with Exascale projects
 - \$4M magnet project for axion search at IBS (Korea) near signing
 - Progress on NCI sponsored projects at NSRL
 - Business plan for cyclotron-based production of radio-metals submitted to NP Isotope Program
- Uncertainty about policy directions of Trump administration
 - DOE transition team just starting work
 - Little indication about likely science priorities



Salaries & Goals

Salaries:

- Flat 1% salary raise planned for 2017
- Main reasons: CR expected, aims to avoid further staff reductions

Goals:

- It's goal setting season again
- Overarching Lab goals are summarized in Lab Agenda (available on BNL Intranet)
- Please talk to your supervisor about FY2017 goals
- Write down a few goals and review them at regular intervals



PEMP "Notables" for FY2017

- Goal 2.0 Design, Fabrication, Construction and Operation of Research Facilities
- **HEP:** By the end of January 2017, complete a cost, schedule, and project plan for ATF-II. Complete a cost, schedule, and plan for completing the CO₂ laser system and retiring ATF-II project risks associated with achieving stable 20 TW peak power performance.
- **HEP:** By September 2017, hold an internal review in preparation for CD-1, bringing additional clarity to deliverables, schedule, and resource requirements for the ATLAS detector upgrade project for HL-LHC at CERN.
- NP: Implement LEReC accelerator improvement project according to approved project plans.
- Goal 3.0 Program Management
- HEP: Ensure LSST assigned responsibilities are accomplished without causing a delay to the projects critical milestones. Work with SLAC to effectively resolve cost, schedule and technical issues that are within BSA projects responsibilities.



Commitment to Diversity

- Message needs to be non-political
- Intent to send a Holiday message to Users
- Draft:

As we enter the Holiday season, is timely to remind ourselves that an important element of our culture is the daily practice of the qualities that make it possible for a large and diverse community to work together -- tolerance, courtesy and respect – regardless of nationality, ethnicity, race, gender, sexual preference, religious belief, or political orientation. Creating such an environment relies on official policies and practices, but it depends even more on everyone's personal responsibility. We urge you to commit yourself to helping us sustain such an inclusive environment at BNL and at all other venues where BNL users are present.

Comments and suggestions are welcomed



Happy Holidays!